BIRCH, STEWART, KOLASCH & BIRCH, LLP

PLEASE NOTE: YOU MUST COMPLETE THE FOLLOWING P.O. Box 747 • Falls Church, Virginia 22040-0747 Telephone: (703) 205-8000 • Facsimile: (703) 205-8050

COMBINED DECLARATION AND POWER OF ATTORNEY FOR PATENT AND DESIGN APPLICATIONS

| | As a below named inven | tor, I hereby declare that: my | residence, post office address and ci | tizenship are as stated | |
|---|---|---|---|---|--|
| | lext to my name; that I verily believe that I am the original, first and sole inventor (if only one inventor is named | | | | |
| | below) of an original, first and joint inventor (if plural inventors are named below) of the subject matter which is | | | | |
| | ciaimed and for which a p | patent is sought on the invent | ion entitled: | | |
| Insert Title: | IHKEAD | | PROTEIN AND SILK WORM PRO | | |
| Dill in Ammunica | mocret transport an act total | n is attached hereto. If not at he had above and/or the following | tached hereto, the application is ider | ntified by the attorney | |
| Fill in Appropriate Information - | The specification was med | d on as | United States Application Number _ | ; | |
| Con I loo Wish out | and amended on | (if applicable | e) and/or | · · · · · · · · · · · · · · · · · · · | |
| For Use Without Specification | the specification was filed | on <u>January 12, 2005</u> as PC | T International Application Number | PCT/JP2005/000619 : | |
| Attached: | and was amended on | (if ap | plicable) | | |
| | I acknowledge the du Federal Regulations, §1.56. | ty to disclose information whi | plicable) the contents of the above-identified specific is material to patentability as defined. | ed in Title 37, Code of | |
| | I do not know and do | not believe the same was ever | known or used in the United States of | America before my or | |
| | thereof or more than one ve | ar prior to this application tha | inted publication in any country befor | e my or our invention | |
| | or smith a more diant offer | veal bliof to this application to | nat the invention has not been material | | |
| | are niverton's certificate issue | teu before the date of this appl | ication in any country foreign to the Unor assigns more than twelve months (s | nited Ctates of America | |
| | prior to dus applications and | u wat no application for patent | or inventor's certificate on this invention this application by me or my legal representation or my legal representation. | _ 1 1 | |
| | I hereby claim foreign | priority benefits under Title 3! | , United States Code, §119(a)-(d) of any | v foreign application(s) | |
| | ior barcett or miretifor? (6) | imicale usieu below and navi | e also identified below any foreign ap application on which priority is claimed: | mlication for material and | |
| | Prior Foreign Application | on(s) | Promise water priority is chamica. | Priority Claimed | |
| Insert Priority | 2004-005489 | Japan | January 13, 2004 | x | |
| Information (if appropriate) | (Number) | (Country) | (Month/Day/Year Filed) | Yes No | |
| (= -FFF) | | <u></u> | , | | |
| | (Number) | (Country) | (Month/Day/Year Filed) | Yes No | |
| • | | | | | |
| | (Number) | (Country) | (Month/Day/Year Filed) | Yes No | |
| | | | | | |
| | (Number) | (Country) | (Month/Day/Year Filed) | Yes No | |
| | I hereby claim the benefit usefit to | under Title 35, United States C | Code, §119(e) of any United States prov | visional applications(s) | |
| Insert Provisional | | | | | |
| Application(s): (if any) | (Application Number) | | (Filing Date) | | |
| , | (Application Number) | | (Filing Date) | | |
| | All Foreign Applications, if Designs) Prior to the Filing D | any, for any Patent or Inver Date of This Application: | ntor's Certificate Filed More than 12 N | Months (6 Months for | |
| Insert Requested Information (if appropriate) | Country | Applicati | on Number Date of Filing (| (Month/Day/Year) | |
| | this application is not discloparagraph of Title 35, United patentability as defined in Ti | n-part application(s) listed belowed in the prior United States States Code, §112, I acknowled the 37, Code of Federal Regulation | Code, §120 of any United States and/ow and, insofar as the subject matter of and/or PCT application in the manner edge the duty to disclose information with ions, §1.56 which became available betail filing date of this application. | each of the claims of provided by the first hich is material to the | |
| Insert Prior U.S. | | | | | |
| Application(s): (if any) | (Application Number) | (Filing Date) | (Status - patented, pe | ending, abandoned) | |
| | (Application Number) | (Filing Date) | (Status - patented, pe | ending, abandoned) | |

(Rev. 05/2004)

I hereby appoint the practitioners at CUSTOMER NO. 02292 as my attorneys or agents to prosecute this application and/or an international application based on this application and to transact all business in the United States Patent and Trademark Office connected therewith and in connection with the resulting patent based on instructions received from the entity who first sent the application papers to the practitioners, unless the inventor(s) or assignee provides said practitioners with a written notice to the contrary:

Send Correspondence to:

CUSTOMER NO. 02292; (BIRCH, STEWART, KOLASCH & BIRCH, LLP)

Telephone: (703) 205-8000 • Facsimile: (703) 205-8050

PLEASE NOTE: YOU MUST COMPLETE THE FOLLOWING:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

| ▼ | | | | | |
|--|---|-------------------------------------|------------------|--|--|
| Full Name of First or Sole Inventor: | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | | |
| Insert Name of Inventor → Insert Date This | Shingo HIRAMATSU | | | | |
| Document is Signed Insert Residence | Residence (City, State & Country) | | CITIZENSHIP | | |
| Insert Chizenship → | Fujisawa-shi, Kanagawa, Japan | | Japan | | |
| Ensert Post Office | MAILING ADDRESS (Complete Street Address | is including City. State & Country) | Jupan | | |
| Address → | City-Heim202, 802-1, Kotsuka, Fujisawa-shi, K | anagawa, 251-0013 JAPAN | | | |
| Full Name of Second | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | | |
| Inventor, if any: see above | Hiromitsu MORIYAMA | | | | |
| | Residence (City, State & Country) | | CITIZENSHIP | | |
| | Fuchu-shi, Tokyo, Japan | | Japan | | |
| | MAILING ADDRESS (Complete Street Address | s including City, State & Country) | | | |
| | 3-301, 2-40-1, Saiwai-cho, Fuchu-shi, Tokyo, 18 | 3-0054 JAPAN | | | |
| Full Name of Third | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | | |
| Inventor, if any: see above | Ryota ASAOKA | | | | |
| | Residence (City, State & Country) | | CITIZENSHIP | | |
| | Kamakura-shi, Kanagawa, Japan | Japan | | | |
| | MAILING ADDRESS (Complete Street Address | s including City, State & Country) | | | |
| | Toray Kamakurayamaryo 407, 3-20-1, Kamaku | rayama, Kamakura-shi, Kanagawa, | , 248-0031 JAPAN | | |
| Full Name of Fourth | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | | |
| Inventor, if any: see above | Ken MORITA | | | | |
| | Residence (City, State & Country) | | CITIZENSHIP | | |
| | Chigasaki-shi, Kanagawa, Japan | • | Japan | | |
| | MAILING ADDRESS (Complete Street Address including City, State & Country) | | | | |
| | Mezontorantannufu 202, 1-8-39, Nango, Chigas | aki-shi, Kanagawa, 253-0061 JAPA | N | | |
| Full Name of Fifth | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | | |
| Inventor, if any: see above | Takashi TANAKA | Takashi Tanaka | June 21,2006 | | |
| | Residence (City, State & Country) | Tarrigat los acts | CITIZENSHIP | | |
| | Nagoya-shi, Aichi, Japan | | Japan | | |
| | MAILING ADDRESS (Complete Street Address including City, State & Country) | | | | |
| | Atrait Uchidabashi 1101, 1-7-5, Meiji, Minato-ku, Nagoya-shi, Aichi, 457-0851 JAPAN | | | | |
| Full Name of Sixth | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | | |
| Inventor, if any: see above | Katsushige YAMADA | | | | |
| Į. | Residence (City, State & Country) | .1 | CITIZENSHIP | | |
| | Kamakura-shi, Kanagawa, Japan | | Japan | | |
| 1 | MAILING ADDRESS (Complete Street Address | including City, State & Country) | | | |
| | E-1, 2-3-21, Tsunishi, Kamakura-shi, Kanagawa, | 248-0034 TAPAN | | | |

^{*}DATE OF SIGNATURE

| Full Name of Seventh Inventor, if any: | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | | DATE* | |
|---|---|----------------------------------|----------------|-----------------|--|
| see above | John Philip OBRIEN | | | | |
| | Residence (City, State & Country) | | CITIZENS | SHIP | |
| | Oxford, Pennsylvania, US | | US | | |
| • | MAILING ADDRESS (Complete Street Address | including City, State & Country) | - - | | |
| | 871 Saginaw Road, Oxford, Pennsylvania 19363 | U.S.A. | | | |
| Full Name of Eight | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | | DATE* | |
| Inventor, if any: see above | Stephen R. FAHNESTOCK | | | | |
| | Residence (City, State & Country) | L | CITIZENS | HIP | |
| | Wilmington, Delaware, US | | | US | |
| | MAILING ADDRESS (Complete Street Address | including City, State & Country) | | | |
| | 719 Mount Lebanon Road, Wilmington, Delawa | re 19803 U.S.A. | | | |
| Full Name of Ninth | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | | DATE* | |
| Inventor, if any: see above | | | | | |
| 7 7 9 | Residence (City, State & Country) | | CITIZENS | HIP | |
| | | | | | |
| | MAILING ADDRESS (Complete Street Address | including City, State & Country) | | | |
| | | | | | |
| Full Name of Tenth | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | | DATE* | |
| Inventor, if any: see above | | | | | |
| | Residence (City, State & Country) | | CITIZENS | HIP | |
| | | | | | |
| | MAILING ADDRESS (Complete Street Address including City, State & Country) | | | | |
| | | | | | |
| Full Name of Eleventh | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | | DATE* | |
| Inventor, if any: see above | | | | | |
| | Residence (City, State & Country) | | CITIZENSHIP | | |
| | | | | | |
| | MAILING ADDRESS (Complete Street Address including City, State & Country) | | | | |
| | · · | | | | |
| Full Name of Twelfth | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | | DATE* | |
| Inventor, if any: see above | | | | | |
| | Residence (City, State & Country) | | CITIZENSI | ·ПР | |
| | | · | | | |
| | MAILING ADDRESS (Complete Street Address including City, State & Country) | | | | |
| | | | | | |
| Full Name of Thirteenth | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | | DATE* | |
| Inventor, if any: | | | | | |
| | Residence (City, State & Country) | | CITIZENSH | I IP | |
| | | | | | |
| <u>t</u> | MAILING ADDRESS (Complete Street Address in | ncluding City, State & Country) | | | |
| İ | | | | | |
| | | - | | | |

^{*}DATE OF SIGNATURE

BIRCH, STEWART, KOLASCH & BIRCH, LLP

PLEASE NOTE: YOU MUST COMPLETE THE FOLLOWING P.O. Box 747 • Falls Church, Virginia 22040-0747 Telephone: (703) 205-8000 • Facsimile: (703) 205-8050

COMBINED DECLARATION AND POWER OF ATTORNEY FOR PATENT AND DESIGN APPLICATIONS

| | As a below named inve | ntor, I hereby decla | re that: my residence, p | post office address and citiz | zenship are as stated | | |
|---------------------------------------|--|--|------------------------------|---|--|--|--|
| | As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated next to my name; that I verily believe that I am the original, first and sole inventor (if only one inventor is named | | | | | | |
| | below) or an original, h | rst and joint invent | or (if plural inventors a | re named below) of the sul | bject matter which is | | |
| • | claimed and for which a | patent is sought or | the invention entitled: | | | | |
| Insert Title: | IHKEAD | | | AND SILK WORM PROD | | | |
| Y2:11 :- A | the specification of which is attached hereto. If not attached hereto, the application is identified by the attodocket number as set forth above and/or the following: | | | | | | |
| Information - | I in Appropriate The specification was filed on | | | s Application Number | | | |
| | and amended on | (i | f applicable) and/or | | | | |
| For Use Without Specification | the specification was file | the specification was filed on <u>January 12, 2005</u> as PCT International Application Number <u>PCT/JP2005/000619</u> ; | | | | | |
| Attached: | and was amended on | | (if applicable) | | | | |
| | I hereby state that I | have reviewed and ı | inderstand the contents of | of the above-identified specif | ication, including the | | |
| | T | Y 441115124111611 | 71 IIN AIW IVA | | | | |
| | reactarite garagors, 31.50 | · | | al to patentability as defined | | | |
| | I do not know and d | lo not believe the sai | me was ever known or u | sed in the United States of A | America before my or | | |
| | om misermon mereor, or | patented of describe | ed in any printed mublic | ation in any country before | mar or our inlin- | | |
| | or which the man out | e vear prior to this at | Oblication, that the invent | as not in public use or on sal- tion has not been patented o | e mada tha auticet at | | |
| | an minerior 2 cermicate is | suea perore the date | Of this application in any | v country foreign to the Heil | tool Chapton of A | | |
| | on an application their by | The or my legal red | resentative or assigns m | ore than twelve months (six certificate on this invention | months for decisional | | |
| | comitty total at the Or | ited States of Ameri | ca prior to this application | on by me or my legal repres | has been filed in any sentatives or assigns | | |
| | CACCOL do TOHOTAS. | | | | | | |
| | for patent or inventor's | I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate beginning a filing data before that a filing data before the fili | | | | | |
| | inventor's certificate havir | g a filing date before | that of the application or | n which priority is claimed: | ication for patent or | | |
| | Prior Foreign Applica | tion(s) | | - · · · · · · · · · · · · · · · · · · · | Priority Claimed | | |
| Insert Priority | 2004-005489 | J: | apan | January 13, 2004 | × | | |
| Information (if appropriate) | (Number) | (Country) | (| Month/Day/Year Filed) | Yes No | | |
| · · · · · · · · · · · · · · · · · · · | | | • | • | | | |
| | (Number) | (Country) | (| Month/Day/Year Filed) | Yes No | | |
| | | | | • | | | |
| | (Number) | (Country) | | Month/Day/Year Filed) | Yes No | | |
| | | | | • | | | |
| | (Number) | (Country) | | Month/Day/Year Filed) | Yes No | | |
| | I hereby claim the benefit under Title 35, United States Code, \$119(e) of any United States provisional applications(s) | | | | | | |
| Import Duranisian al | listed below. | | | • | (/ | | |
| Insert Provisional Application(s): | | | | | | | |
| (if any) | (Application Number) | | (Filing D | ate) | | | |
| | | | | | | | |
| | (Application Number) | | (Filing Da | ate) | | | |
| | All Foreign Applications, if any, for any Patent or Inventor's Certificate Filed More than 12 Months (6 Months for Designs) Prior to the Filing Date of This Application: | | | | | | |
| Insert Requested | Country | | Application Number | Date of Filing (N | fonth/Day/Year) | | |
| Information | • | | | | ional, Day, Ical) | | |
| (if appropriate) | | | | | | | |
| | ······ | | | | | | |
| | I hereby claim the benefit under Title 35, United States Code, §120 of any United States and/or PCT application(s), | | | | | | |
| | including for continuation-in-part application(s) listed below and, insofar as the subject matter of each of the claims of | | | | | | |
| | this application is not disclosed in the prior United States and/or PCT application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information which is material to the | | | | | | |
| | patentability as defined in Title 37, Code of Federal Regulations, \$1.56 which became available between the filing date | | | | | | |
| | of the prior application and the national or PCT international filing date of this application. | | | | | | |
| Insert Prior U.S. | | | 5 | 11 | | | |
| Application(s): | (Application Number) | <u>(F</u> | iling Date) | (Status - patented, pen | ding, abandoned) | | |
| (if any) | | | , | , parented per | | | |
| · | (Application Number) | | iling Date) | (Status - patented, pen | ding, abandoned) | | |
| | | • | - | | , | | |

(Rev. 05/2004)

I hereby appoint the practitioners at CUSTOMER NO. 02292 as my attorneys or agents to prosecute this application and/or an international application based on this application and to transact all business in the United States Patent and Trademark Office connected therewith and in connection with the resulting patent based on instructions received from the entity who first sent the application papers to the practitioners, unless the inventor(s) or assignee provides said practitioners with a written notice to the contrary:

Send Correspondence to:

CUSTOMER NO. 02292; (BIRCH, STEWART, KOLASCH & BIRCH, LLP)

Telephone: (703) 205-8000 • Facsimile: (703) 205-8050

| PLEASE NOTE: |
|--------------|
| YOU MUST |
| COMPLETE |
| THE |
| FOLLOWING: |

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

| Full Name of First or Sole Inventor: | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | |
|--|--|--|--|--|
| Insert Name of Inventor → | Shingo HIRAMATSU | 11/ 2/ | June 21,2006 | |
| Insert Date This Document is Signed | Parish and City City Co. | Shingo Kiramatsur | | |
| Insert Residence Insert Citizenship -> | Residence (City, State & Country) | V | CITIZENSHIP | |
| and Canthage - | Fujisawa-shi, Kanagawa, Japan | . 1 1: 0: 0 | Japan | |
| Insert Post Office Address → | MAJLING ADDRESS (Complete Street Address City-Heim202, 802-1, Kotsuka, Fujisawa-shi, Ka | including City, State & Country) | | |
| | | nagawa, 251-0015 JAPAN | | |
| Full Name of Second | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | |
| Inventor, if any: see above | Hiromitsu MORIYAMA | Directo Mines | June 21,2006 | |
| | Residence (City, State & Country) | The state of the s | CITIZENSHIP | |
| | Fuchu-shi, Tokyo, Japan | | Japan | |
| | MAILING ADDRESS (Complete Street Address | including City, State & Country) | | |
| | 3-301, 2-40-1, Saiwai-cho, Fuchu-shi, Tokyo, 183 | -0054 JAPAN | | |
| Full Name of Third | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | |
| Inventor, if any: | Ryota ASAOKA | | • 1 | |
| see above | | Kyota Bracka | June 21,2006 | |
| | Residence (City, State & Country) | | CITIZENSHIP | |
| | Kamakura-shi, Kanagawa, Japan | | Japan Japan | |
| | MAILING ADDRESS (Complete Street Address including City, State & Country) Toray Kamakurayamaryo 407, 3-20-1, Kamakurayama, Kamakura-shi, Kanagawa, 248-0031 JAPAN | | | |
| | Toruy Kantakurayantaryo 407, 5-20-1, Kantakura | ayama, Kamakura-sin, Kanagawa, | 248-0031 JAPAN | |
| Full Name of Fourth | | | | |
| | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | |
| Full Name of Fourth Inventor, if any: see above | GIVEN NAME/FAMILY NAME Ken MORITA | | | |
| Inventor, if any: | , , , , , , , , , , , , , , , , , , , | INVENTOR'S SIGNATURE Ken Horkta | June 21,2006 | |
| Inventor, if any: | Ken MORITA | | | |
| Inventor, if any: | Ken MORITA Residence (City, State & Country) Chigasaki-shi, Kanagawa, Japan MAILING ADDRESS (Complete Street Address | Ken Horita including City, State & Country) | June 21,2006 CITIZENSHIP Japan | |
| Inventor, if any: | Ken MORITA Residence (City, State & Country) Chigasaki-shi, Kanagawa, Japan | Ken Horita including City, State & Country) | June 21,2006 CITIZENSHIP Japan | |
| Inventor, if any: | Ken MORITA Residence (City, State & Country) Chigasaki-shi, Kanagawa, Japan MAILING ADDRESS (Complete Street Address | Ken Horita including City, State & Country) | June 21,2006 CITIZENSHIP Japan N | |
| Inventor, if any: see above | Ken MORITA Residence (City, State & Country) Chigasaki-shi, Kanagawa, Japan MAILING ADDRESS (Complete Street Address Mezontorantannufu 202, 1-8-39, Nango, Chigasa | Ken Horkta including City, State & Country) ki-shi, Kanagawa, 253-0061 JAPA | June 21,2006 CITIZENSHIP Japan | |
| Inventor, if any: see above Full Name of Fifth Inventor, if any: | Ken MORITA Residence (City, State & Country) Chigasaki-shi, Kanagawa, Japan MAILING ADDRESS (Complete Street Address Mezontorantannufu 202, 1-8-39, Nango, Chigasa GIVEN NAME/FAMILY NAME Takashi TANAKA | Ken Horkta including City, State & Country) ki-shi, Kanagawa, 253-0061 JAPA | June 21,2006 CITIZENSHIP Japan N DATE* | |
| Inventor, if any: see above Full Name of Fifth Inventor, if any: | Ken MORITA Residence (City, State & Country) Chigasaki-shi, Kanagawa, Japan MAILING ADDRESS (Complete Street Address Mezontorantannufu 202, 1-8-39, Nango, Chigasa GIVEN NAME/FAMILY NAME Takashi TANAKA Residence (City, State & Country) | Ken Horkta including City, State & Country) ki-shi, Kanagawa, 253-0061 JAPA | June 21,2006 CITIZENSHIP Japan DATE* CITIZENSHIP | |
| Inventor, if any: see above Full Name of Fifth Inventor, if any: | Ken MORITA Residence (City, State & Country) Chigasaki-shi, Kanagawa, Japan MAILING ADDRESS (Complete Street Address Mezontorantannufu 202, 1-8-39, Nango, Chigasa GIVEN NAME/FAMILY NAME Takashi TANAKA Residence (City, State & Country) Nagoya-shi, Aichi, Japan | Ken Horkta including City, State & Country) ki-shi, Kanagawa, 253-0061 JAPA INVENTOR'S SIGNATURE | June 21,2006 CITIZENSHIP Japan N DATE* | |
| Inventor, if any: see above Full Name of Fifth Inventor, if any: | Residence (City, State & Country) Chigasaki-shi, Kanagawa, Japan MAILING ADDRESS (Complete Street Address Mezontorantannufu 202, 1-8-39, Nango, Chigasa GIVEN NAME/FAMILY NAME Takashi TANAKA Residence (City, State & Country) Nagoya-shi, Aichi, Japan MAILING ADDRESS (Complete Street Address) | including City, State & Country) ki-shi, Kanagawa, 253-0061 JAPA INVENTOR'S SIGNATURE including City, State & Country) | June 21,2006 CITIZENSHIP Japan DATE* CITIZENSHIP Japan | |
| Full Name of Fifth Inventor, if any: see above | Ken MORITA Residence (City, State & Country) Chigasaki-shi, Kanagawa, Japan MAILING ADDRESS (Complete Street Address Mezontorantannufu 202, 1-8-39, Nango, Chigasa GIVEN NAME/FAMILY NAME Takashi TANAKA Residence (City, State & Country) Nagoya-shi, Aichi, Japan MAILING ADDRESS (Complete Street Address Atrait Uchidabashi 1101, 1-7-5, Meiji, Minato-ku, | including City, State & Country) ki-shi, Kanagawa, 253-0061 JAPA INVENTOR'S SIGNATURE including City, State & Country) , Nagoya-shi, Aichi, 457-0851 JAPA | June 21,2006 CITIZENSHIP Japan DATE* CITIZENSHIP Japan AN | |
| Inventor, if any: see above Full Name of Fifth Inventor, if any: | Ken MORITA Residence (City, State & Country) Chigasaki-shi, Kanagawa, Japan MAILING ADDRESS (Complete Street Address Mezontorantannufu 202, 1-8-39, Nango, Chigasa GIVEN NAME/FAMILY NAME Takashi TANAKA Residence (City, State & Country) Nagoya-shi, Aichi, Japan MAILING ADDRESS (Complete Street Address Atrait Uchidabashi 1101, 1-7-5, Meiji, Minato-ku, GIVEN NAME/FAMILY NAME | including City, State & Country) ki-shi, Kanagawa, 253-0061 JAPA INVENTOR'S SIGNATURE including City, State & Country) , Nagoya-shi, Aichi, 457-0851 JAPA INVENTOR'S SIGNATURE | June 21,2006 CITIZENSHIP Japan DATE* CITIZENSHIP Japan | |
| Full Name of Fifth Inventor, if any: see above | Ken MORITA Residence (City, State & Country) Chigasaki-shi, Kanagawa, Japan MAILING ADDRESS (Complete Street Address Mezontorantannufu 202, 1-8-39, Nango, Chigasa GIVEN NAME/FAMILY NAME Takashi TANAKA Residence (City, State & Country) Nagoya-shi, Aichi, Japan MAILING ADDRESS (Complete Street Address Atrait Uchidabashi 1101, 1-7-5, Meiji, Minato-ku, GIVEN NAME/FAMILY NAME Katsushige YAMADA | including City, State & Country) ki-shi, Kanagawa, 253-0061 JAPA INVENTOR'S SIGNATURE including City, State & Country) , Nagoya-shi, Aichi, 457-0851 JAPA INVENTOR'S SIGNATURE | June 21,2006 CITIZENSHIP Japan DATE* CITIZENSHIP Japan AN | |
| Full Name of Fifth Inventor, if any: see above Full Name of Sixth Inventor, if any: | Residence (City, State & Country) Chigasaki-shi, Kanagawa, Japan MAILING ADDRESS (Complete Street Address Mezontorantannufu 202, 1-8-39, Nango, Chigasa GIVEN NAME/FAMILY NAME Takashi TANAKA Residence (City, State & Country) Nagoya-shi, Aichi, Japan MAILING ADDRESS (Complete Street Address Atrait Uchidabashi 1101, 1-7-5, Meiji, Minato-ku, GIVEN NAME/FAMILY NAME Katsushige YAMADA Residence (City, State & Country) | including City, State & Country) ki-shi, Kanagawa, 253-0061 JAPA INVENTOR'S SIGNATURE including City, State & Country) , Nagoya-shi, Aichi, 457-0851 JAPA | June 21,2006 CITIZENSHIP Japan CITIZENSHIP Japan AN DATE* | |
| Full Name of Fifth Inventor, if any: see above Full Name of Sixth Inventor, if any: | Residence (City, State & Country) Chigasaki-shi, Kanagawa, Japan MAILING ADDRESS (Complete Street Address Mezontorantannufu 202, 1-8-39, Nango, Chigasa GIVEN NAME/FAMILY NAME Takashi TANAKA Residence (City, State & Country) Nagoya-shi, Aichi, Japan MAILING ADDRESS (Complete Street Address Atrait Uchidabashi 1101, 1-7-5, Meiji, Minato-ku, GIVEN NAME/FAMILY NAME Katsushige YAMADA Residence (City, State & Country) Kamakura-shi, Kanagawa, Japan | including City, State & Country) ki-shi, Kanagawa, 253-0061 JAPA INVENTOR'S SIGNATURE including City, State & Country) Nagoya-shi, Aichi, 457-0851 JAPA INVENTOR'S SIGNATURE Katsuskize Yama | CITIZENSHIP Japan CITIZENSHIP Japan CITIZENSHIP Japan AN DATE* ADA DATE* June 21,2006 | |
| Full Name of Fifth Inventor, if any: see above Full Name of Sixth Inventor, if any: | Residence (City, State & Country) Chigasaki-shi, Kanagawa, Japan MAILING ADDRESS (Complete Street Address Mezontorantannufu 202, 1-8-39, Nango, Chigasa GIVEN NAME/FAMILY NAME Takashi TANAKA Residence (City, State & Country) Nagoya-shi, Aichi, Japan MAILING ADDRESS (Complete Street Address Atrait Uchidabashi 1101, 1-7-5, Meiji, Minato-ku, GIVEN NAME/FAMILY NAME Katsushige YAMADA Residence (City, State & Country) | including City, State & Country) ki-shi, Kanagawa, 253-0061 JAPA INVENTOR'S SIGNATURE including City, State & Country) Nagoya-shi, Aichi, 457-0851 JAPA INVENTOR'S SIGNATURE Katsuskuğe Jama including City, State & Country) | June 21,2006 CITIZENSHIP Japan CITIZENSHIP Japan AN DATE* June 21,2006 CITIZENSHIP | |

^{*}DATE OF SIGNATURE

| Full Name of Seventh Inventor, if any: | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | | DATE* | | |
|--|--|--------------------------------------|--|-------------|--|--|
| see above | John Philip OBRIEN | | | | | |
| | Residence (City, State & Country) | | CITIZENS | SHIP | | |
| | Oxford, Pennsylvania, US | | US | | | |
| | MAILING ADDRESS (Complete Street Addre | ess including City, State & Country) | | | | |
| | 871 Saginaw Road, Oxford, Pennsylvania 193 | 63 U.S.A. | | | | |
| Full Name of Eight | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | | DATE* | | |
| Inventor, if any: see above | Stephen R. FAHNESTOCK | | | | | |
| | Residence (City, State & Country) | | CITIZENS | L SHIP | | |
| | Wilmington, Delaware, US | | | US | | |
| | MAILING ADDRESS (Complete Street Addre | ss including City, State & Country) | | | | |
| | 719 Mount Lebanon Road, Wilmington, Delay | | | | | |
| | | | ور و و و و و و و و و و و و و و و و و و | | | |
| Full Name of Ninth Inventor, if any: see above | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | | DATE* | | |
| | Residence (City, State & Country) | | CITIZENS | HIP | | |
| | | | | | | |
| | MAILING ADDRESS (Complete Street Address including City, State & Country) | | | | | |
| | | | | | | |
| Full Name of Tenth | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | | DATE | | |
| Inventor, if any: | | MATERIORS SIGNATURE | | DATE* | | |
| | Residence (City, State & Country) | | CITIZENS | LITD | | |
| | (), () | | | 1 111 | | |
| | MAILING ADDRESS (Complete Street Address | es including City State & County | | | | |
| | MAILING ADDRESS (Complete Street Address including City, State & Country) | | | | | |
| | | | | | | |
| Full Name of Eleventh Inventor, if any: | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | | DATE* | | |
| see above | | | | | | |
| | Residence (City, State & Country) | | CITIZENS | CITIZENSHIP | | |
| | | | | | | |
| | MAILING ADDRESS (Complete Street Address including City, State & Country) | | | | | |
| | · · | | | | | |
| Full Name of Twelfth | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | | DATE* | | |
| Inventor, if any: see above | | | | | | |
| | Residence (City, State & Country) | | CITIZENSI | -IIP | | |
| | | | | | | |
| | MAILING ADDRESS (Complete Street Address including City, State & Country) | | | | | |
| | | 5 7 , | | | | |
| Full Name of | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | | T) A TITY | | |
| Thirteenth Inventor, if any: | CIVER INTERIES, ITEMIES INTERIES | INVENTORSSIGNATURE | | DATE* | | |
| see above | Residence (City, State & Country) | <u> </u> | CHIZEVICI | л | | |
| | (will a country) | | CITIZENSI | ur | | |
| | MAILING ADDRESS (Commission of the Commission of | | | | | |
| | MAILING ADDRESS (Complete Street Addres | s including City, State & Country) | | | | |
| | | | | | | |

^{*}DATE OF SIGNATURE

BIRCH, STEWART, KOLASCH & BIRCH, LLP

PLEASE NOTE: YOU MUST COMPLETE THE FOLLOWING P.O. Box 747 • Falls Church, Virginia 22040-0747 Telephone: (703) 205-8000 • Facsimile: (703) 205-8050

COMBINED DECLARATION AND POWER OF ATTORNEY FOR PATENT AND DESIGN APPLICATIONS

As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated next to my name; that I verily believe that I am the original, first and sole inventor (if only one inventor is named below) or an original, first and joint inventor (if plural inventors are named below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: SILK THREAD CONTAINING SPIDER THREAD PROTEIN AND SILK WORM PRODUCING THE SILK **Insert Title:** THREAD the specification of which is attached hereto. If not attached hereto, the application is identified by the attorney docket number as set forth above and/or the following: Fill in Appropriate The specification was filed on ______ as United States Application Number _____; Information and amended on _____ (if applicable) and/or For Use Without the specification was filed on <u>January 12, 2005</u> as PCT International Application Number <u>PCT/JP2005/000619</u>; Specification Attached: and was amended on (if applicable) I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56. I do not know and do not believe the same was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to this application, that the same was not in public use or on sale in the United States of America more than one year prior to this application, that the invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on an application filed by me or my legal representative or assigns more than twelve months (six months for designs) prior to this application, and that no application for patent or inventor's certificate on this invention has been filed in any country foreign to the United States of America prior to this application by me or my legal representatives or assigns, except as follows. I hereby claim foreign priority benefits under Title 35, United States Code, §119(a)-(d) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed: Prior Foreign Application(s) **Priority Claimed Insert Priority** 2004-005489 January 13, 2004 Japan (Month/Day/Year Filed) Information (Country) (Number) No (if appropriate) (Number) No (Country) (Month/Day/Year Filed) Yes (Month/Day/Year Filed) (Country) (Number) No Yes (Month/Day/Year Filed) (Country) (Number) Yes No I hereby claim the benefit under Title 35, United States Code, §119(e) of any United States provisional applications(s) listed below. **Insert Provisional** Application(s): (Application Number) (Filing Date) (if any) (Application Number) (Filing Date) All Foreign Applications, if any, for any Patent or Inventor's Certificate Filed More than 12 Months (6 Months for Designs) Prior to the Filing Date of This Application: Insert Requested Country **Application Number** Date of Filing (Month/Day/Year) Information (if appropriate) I hereby claim the benefit under Title 35, United States Code, §120 of any United States and/or PCT application(s), including for continuation-in-part application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States and/or PCT application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information which is material to the patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application. Insert Prior U.S. Application(s): (Application Number) (Filing Date) (Status - patented, pending, abandoned) (if any) (Application Number) (Filing Date) (Status - patented, pending, abandoned)

(Rev. 05/2004)

I hereby appoint the practitioners at CUSTOMER NO. 02292 as my attorneys or agents to prosecute this application and/or an international application based on this application and to transact all business in the United States Patent and Trademark Office connected therewith and in connection with the resulting patent based on instructions received from the entity who first sent the application papers to the practitioners, unless the inventor(s) or assignee provides said practitioners with a written notice to the contrary:

Send Correspondence to:

CUSTOMER NO. 02292; (BIRCH, STEWART, KOLASCH & BIRCH, LLP)

Telephone: (703) 205-8000 • Facsimile: (703) 205-8050

PLEASE NOTE: YOU MUST COMPLETE THE FOLLOWING:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

| Full Name of First or Sole Inventor: Insert Name of Inventor → Insert Date This | GIVEN NAME/FAMILY NAME Shingo HIRAMATSU | INVENTOR'S SIGNATURE | DATE* | |
|---|---|----------------------------------|----------------------|--|
| Document is Signed Insert Residence Insert Citizenship → | Residence (City, State & Country) Fujisawa-shi, Kanagawa, Japan | | CITIZENSHIP Japan | |
| Insert Post Office Address → | MAILING ADDRESS (Complete Street Address including City, State & Country) City-Heim202, 802-1, Kotsuka, Fujisawa-shi, Kanagawa, 251-0013 JAPAN | | | |
| Full Name of Second Inventor, if any: see above | GIVEN NAME/FAMILY NAME Hiromitsu MORIYAMA | INVENTOR'S SIGNATURE | DATE* | |
| | Residence (City, State & Country) Fuchu-shi, Tokyo, Japan | | CITIZENSHIP | |
| | MAILING ADDRESS (Complete Street Address 3-301, 2-40-1, Saiwai-cho, Fuchu-shi, Tokyo, 183- | | Japan | |
| Full Name of Third Inventor, if any: see above | GIVEN NAME/FAMILY NAME Ryota ASAOKA | INVENTOR'S SIGNATURE | DATE* | |
| | Residence (City, State & Country) | CITIZENSHIP | | |
| | Kamakura-shi, Kanagawa, Japan MAILING ADDRESS (Complete Street Address) | including City, State & Country) | Japan | |
| : | Toray Kamakurayamaryo 407, 3-20-1, Kamakura | yama, Kamakura-shi, Kanagawa, | 248-0031 JAPAN | |
| Full Name of Fourth Inventor, if any: see above | GIVEN NAME/FAMILY NAME Ken MORITA | INVENTOR'S SIGNATURE | DATE* | |
| | Residence (City, State & Country) | | CITIZENSHIP | |
| | Chigasaki-shi, Kanagawa, Japan | | Japan | |
| | MAILING ADDRESS (Complete Street Address including City, State & Country) Mezontorantannufu 202, 1-8-39, Nango, Chigasaki-shi, Kanagawa, 253-0061 JAPAN | | | |
| Full Name of Fifth Inventor, if any: see above | GIVEN NAME/FAMILY NAME Takashi TANAKA | INVENTOR'S SIGNATURE | DATE* | |
| | Residence (City, State & Country) | | CITIZENSHIP | |
| - | Nagoya-shi, Aichi, Japan MAILING ADDRESS (Complete Street Address) | Japan | | |
| | AN | | | |
| Full Name of Sixth Inventor, if any: see above | GIVEN NAME/FAMILY NAME Katsushige YAMADA | INVENTOR'S SIGNATURE | DATE* | |
| | Residence (City, State & Country) | | CITIZENSHIP | |
| | Kamakura-shi, Kanagawa, Japan MAILING ADDRESS (Complete Street Address) | including City State & Country | Japan | |
| E-1, 2-3-21, Tsunishi, Kamakura-shi, Kanagawa, 248-0034 JAPAN | | | | |

^{*}DATE OF SIGNATURE

| Full Name of Seventh | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | | |
|---|---|----------------------------------|--------------------|--|--|
| Inventor, if any: see above | John Philip OBRIEN | John Philip O | Brien 2006-06-19 | | |
| | Residence (City, State & Country) | () | CITIZENSHIP | | |
| | Oxford, Pennsylvania, US | | US | | |
| | MAILING ADDRESS (Complete Street Address | including City, State & Country) | | | |
| | 871 Saginaw Road, Oxford, Pennsylvania 19363 U.S.A. | | | | |
| Full Name of Eight | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | | |
| Inventor, if any: see above | Stephen R. FAHNESTOCK | stephen R. July | wellock 2006-06-19 | | |
| | Residence (City, State & Country) | | CITIZENSHIP | | |
| | Wilmington, Delaware, US | | US | | |
| | MAILING ADDRESS (Complete Street Address | including City, State & Country) | | | |
| | 719 Mount Lebanon Road, Wilmington, Delawar | re 19803 U.S.A. | | | |
| Full Name of Ninth Inventor, if any: | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | | |
| see above | | | | | |
| | Residence (City, State & Country) | | CITIZENSHIP | | |
| | | | | | |
| | MAILING ADDRESS (Complete Street Address | including City, State & Country) | | | |
| | | | | | |
| Full Name of Tenth | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | | |
| Inventor, if any: see above | | | | | |
| | Residence (City, State & Country) | | CITIZENSHIP | | |
| | • | | | | |
| | MAILING ADDRESS (Complete Street Address including City, State & Country) | | | | |
| | | | | | |
| Full Name of Eleventh | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | | |
| Inventor, if any: see above | | | | | |
| | Residence (City, State & Country) | | CITIZENSHIP | | |
| | | | | | |
| | MAILING ADDRESS (Complete Street Address i | including City, State & Country) | | | |
| | | | | | |
| Full Name of Twelfth Inventor, if any: | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | | |
| see above | | | | | |
| | Residence (City, State & Country) | · | CITIZENSHIP | | |
| | | | | | |
| | MAILING ADDRESS (Complete Street Address i | including City, State & Country) | | | |
| | | | | | |
| Full Name of Thirteenth | GIVEN NAME/FAMILY NAME | INVENTOR'S SIGNATURE | DATE* | | |
| Inventor, if any: see above | | | · | | |
| | Residence (City, State & Country) | | CITIZENSHIP | | |
| | | | | | |
| | MAILING ADDRESS (Complete Street Address i | including City, State & Country) | | | |
| | | | | | |

^{*}DATE OF SIGNATURE